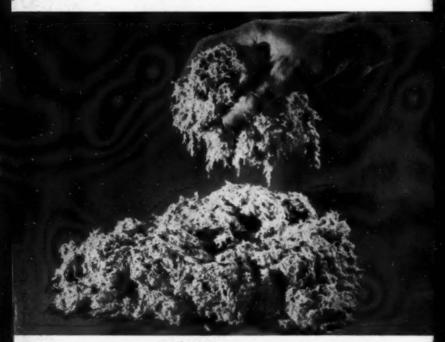
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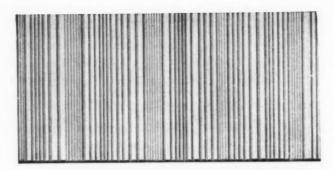
### NOTES ON ASBESTOS DEVELOPMENTS IN CALIFORNIA

By: W. B. Millar, Consulting Geologist

(While in California recently the writer had the opportunity to visit three developing asbestos properties which are deemed worthy of comment here on the basis that other readers of "ASBESTOS" would be equally interested in knowing about such activities. The opinions given, of course, are solely those of the writer. Two of the properties to be discussed (in Calaveras and Napa counties) have long been known and subjected to study by many observers for diverse reasons, ranging from promotional to academic. Both of these are now in earnest hands intent, presumably, on development to the maximum commercial potential. The third property (in both Fresno and San Benito counties) is so new that its future can only be conjectured, but success is indicated thus far.)

CALAVERAS COUNTY — About 42 miles east of Stockton is the largest chrysotile cross-fiber deposit that the writer has studied in California. It is generally called the "Copperopolis asbestos deposit" taking its name from the nearest small town along California's famed, gold-producing Mother Lode. The history of this occurrence goes 'way back, probably 60 years, and old-timers still tell stories of the early, horse-and-buggy prospecting. During World War 2 the property was optioned to strong asbestos operators and the technical work done was orderly and conclusive. Since then at least two other companies have undertaken further development work.

With very satisfactory Canadian-type chrysotile available and ready markets for a considerable tonnage of fiber waiting in California, one would suppose that profitable exploitation would long ago have become a reality. The reason the deposit remains practically untouched is due to the relatively small tonnages of ore which can be shown to be available by open pit mining methods and rich enough, say around 5% salable fiber, to be profitable for a fairly long time after a rather expensive mill is amortized, assuming, as many do, that less than a 2,000 ton per day plant would hardly bring an adequate profit. Apparently the past failures to find satisfactory tonnages are soon forgotten and each succeeding entity does a little more work — and ultimately gets the same results.





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One should always wish success where faith and persistence are being applied. The present owners of Copperopolis asbestos — a local newpaper item dated December 4. 1959, says the purchase price was \$4,620,000 for about 500 acres - have drilled a reported 55 diamond drill holes averaging 200' to 250' deep, with the deepest 600'. The tonnage figure given out is 15,000,000 tons proven, which vastly exceeds any earlier tonnage estimates known to the writer. As no technical data on the drilling results are being made public at present, there is no immediate way to analyze this latest 15,000,000 figure. One supposes it must have been built up by the drilling and thus represent fiber zones which do not outcrop, for despite the extensive bulldozing to clear brush and make a few shallow trenches. the writer did not see any significant new surface ore from that mapped 17 years ago.

The best fiber zone as known in 1943 was oval in shape with the longer axis not more than 350' and the short axis somewhat less. This orebody extends in depth to some point unknown to the writer but the deeper material is out of reach of economic open pitting. Elsewhere on the property there are pockets and lenses of fiber, many showing good, Canadian-type, cross-fiber chrysotile, but none with any persistence either along the strike at surface or at depth, at least as originally drilled in the War years. It would be a pleasure to welcome a new asbestos producer, if, indeed, the picture of tonnage available has changed through

recent work.

NAPA COUNTY — Some 20 twisting and up-and-down miles north of Napa is the short-fiber chrysotile deposit which Kohler and Chase controlled for a number of years. The writer studied it during World War 2 when the search for workable chrysotile in California was at its most urgent. New owners are at present experimenting with fiber recovery using special air separation equipment, the goal being, presumably, to get a cleaner short fiber than the Canadian Group 7 type being shipped in quantity from the east to the west coast. Any method which will cheaply remove dust from short milled fibers will, of course, be welcomed everywhere.

Concerning the deposit itself somewhat the same com-

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ment is possible as at Copperopolis. Seventeen years has not changed in any way the amount of fiber that can be seen at surface. On average the fiberized serpentine is low-grade and the zones with more fiber are usually closely associated with zones of low-grade material or barren rock. The problem of how to maintain a good ore grade when mining 1,000 or more tons a day in an open pit has probably not yet been solved. The best fiberized rock is at present being gouged out of pockets or lenses and no regular working mine benches have been established.

Studying geology in the immediate area of this mountainous Napa county deposit presents some difficulties as there is overburden just about everyplace. Where the serpentine mass has been bulldozed to rock surface in a rather small area, perhaps 200' wide and 400' long along a ridgetop, and also in road cuts and a few scattered prospect cuts, the overburden ranges from a few feet to about 20 feet. Elsewhere there is no way of telling by eye how much overburden there is, or, for that matter, how much good fiber or barren rock underlies this ubiquitous cover. Optimism is scarcely warranted that much better ore will be found when the 'dozing of overburden has been extended.

Where the geology is visible the impression gained was (and remains) that not only is the serpentine well sheared but also that there has been displacement by steep faults. The sharp changes in the appearance of the serpentine from zone to zone, and similarly from fibrous zones to barren rock, give reason enough to expect faulting. Other evidence is that short lenses of high-grade ore with well-developed ribbon structure seem to have been cut off sharply from their probable extensions as originally formed. The amount of ore with rich ribbon structure now found is not great enough to markedly affect the average fiber content of the ore as it will be mined.

The writer is not aware that any spaced diamond drilling has ever been done on this deposit. Possibly some is now contemplated. Obviously formally engineered exploratory work will be necessary to build up tonnages of proven ore in this uniformly overburdened area. In any event, no drilling was in evidence at the time of the visit, February,



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1960. A shovel was at work cutting a short bench on the steep mountain slope a few hundred feet west of the old mill building (which now has new additions) and somewhat above it. A fiber zone of merit may or may not be found as considerable overburden must first be removed to find out what lies below. The question, however, is somewhat academic as a mining method will first have to be established. involving removal of the up-slope overburden, before any ore in quantity can be won from the bench level being established.

The best fiber zones seen in the ridge-top area as now cleaned off consist of sheared serpentine with scattered fiber veinlets with no special orientation, as in most Canadiantype chrysotile deposits. Few veinlets exceed 1/16th inch in width and the number of them along the strike (about east-west apparently) or across the strike in any zone varies greatly from place to place. One would be straining to express a percentage fiber content over a particular face of the many exposed faces. Over all the exposed faces in the bulldozed areas it is possible to say with certainty that the material on average is low-grade, probably too low-grade to be ore under any circumstance if not upgraded by some

method prior to milling.

FRESNO AND SAN BENITO COUNTIES — Some 20 airline miles north of Coalinga in the Diablo Range an unusual and most interesting asbestos development is underway. The fiber is chrysotile but compacted in the long geologic past by great heat and pressure, and probably active hot solutions, to the form commonly known as "mountain leather". In North America specimens of such leather have been found from Alaska to Mexico but because of the small amounts available, the material has always been treated as a "mineralogical curiosity", without economic significance. The very large tonnages, now potentially ore tonnages, north of Coalinga bid fair to change the heretofore lowly economic status of compacted or compressed chrysotile asbestos. Among other uses, a market for the closely sized, dust free, tough asbestos product (very small sheets or mats mixed with "unit" chrysotile fibres) seems possible as fillers in plastic and asphalt floor tiles.

The California type compacted asbestos, perhaps



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bonded asbestos would be a good descriptive term as the fibers are held rather tightly together by talc, has been met with in quantity once before and studied by the writer, at Stragari in Yugoslavia in 1952. The Yugoslavs were originally concerned with trying to reduce the bonded asbestos to more or less "unit" fibers, such as are produced in all asbestos mills. Experience finally showed that whereas the bond holding the fibers together could be broken to a degree by high-speed fiberization and give a fair per cent of short unit fibers, the product at any mesh size still contained many sheets, which we might call fibermats. It was ultimately shown that the mixture of fibermats and fibers not only was a good, usable product but also that for some uses it was a superior product. So similar is the California bonded chrysotile to the Yugoslavian that there is good reason to suppose that its development will follow a like pattern. Several California industries presumably would be happy to have a large local source of good, short fiber chrysotile whether in fibermats or fibers, and hence it is likely that a new asbestos mining and milling business is in the making.

Two companies hold the best of the fiber-bearing lands, Union Carbide (Nuclear Division) and the Mike-Ron Corporation, a subsidiary of Basic Resources, Inc. Together the holdings are said to exceed 12,000 acres, divided about

equally.

Some comments on the geology and nature of the ore may be of interest. The ore occurs in well fractured to highly sheared zones in a serpentine rock mass some twelve miles long and up to four miles wide. The original rock appears to have been a pyroxenite intrusive. The thin, compressed fiber sheets are found along the fractures and shear planes sometimes so abundantly as to make up 30% to 40% of the material mined. The average "ore" grade will be less, quite possibly between 10% and 20% as mined, and with easy screen concentration to raise mill heads above these figures. Cheap open pit mining by power shovel alone will be possible to whatever depth weathering (and thus rock softening) has gone, over 70' as shown so far by the shallow drilling. Indicated tonnages are large as the fiber zones in the weathered serpentine are 50' to several hun-



dred feet wide and in one place, at least, on the Mik-Ron Corporation property as followed by the writer, over a mile long.

The writer visited every known occurrence of chrysotile in California during World War 2 but missed hearing about and hence seeing the Diablo Range's very special product. Apparently its true nature was either not recognized, or anyhow not reported in the literature, by the several geologists intent on their important, wartime studies of many cinnabar and chromite deposits, two minterals also genetically related to the serpentine mass. The New Idria cinnabar property is still a famous producer and is only a short distance from the chrysotile occurrences. The operators of some of the war-encouraged chromite mills were frequently annoved and inclined to roundly berate the "leather" bits which fouled up their wet circuits. These same leather bits now become a useful industrial mineral — and so marches mineral progress with no one ever knowing for sure when a diluent in any ore will become itself an ore. It has happened before.

The bonded chrysotile sheets or mats are interesting to observe at close range both in the ground and during milling processes which are being developed especially for them. Where the serpentine host rock has been "blockily" fractured and the very thin sheets lie along the fractures, any one sheet can measure several square inches in area. The color is white to greenish when dry. Where the serpentine is highly sheared, actually schistose in appearance, the fibermats are often so small as to escape detection by eye as they and the sheared serpentine rock are both soft and green when wet, always the case in the bulldozed trenches and shallow drillholes being used to outline the fiberized zones. Drying and various crushing and screening processes serve to remove the fibermats and leave behind rock particles and most of the dust. Basic Resources, Inc. has another subsidiary doing the pilot milling in Coalinga and the extraordinarily clean product so far produced and to be supplied to industry researchers is based on air separation on a screen of their own design.

As noted previously, the milling process serves to loosen a fair amount of chrysotile fibers from the fibermats so that

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in the potential plastic tile filler products (possibly -35 + 80 mesh, and a -80 mesh) both forms of chrysotile are present. This combining of the two can give a good bulk density averaging, if required, less than 10 pounds per cubic foot, while at the same time, it is reported, giving a strength to the tiles greater than either form of asbestos used separately. Altogether the economic possibilities of Coalinga bonded chrysotile asbestos seem attractive, and the writer, among many others, will be interested to follow this new development.

JOHNS-MANVILLE CORPORATION has licensed THE FLINTKOTE COMPANY to manufacture high and low pressure asbestos-cement pipe long marketed by J-M under the trade name "Transite" and will design and engineer new Flintkote production facilities for this purpose, it was announced jointly on March 29, 1960, by A. R. Fisher, Johns-Manville Chairman, and I. J. Harvey, Jr., Flintkote Chairman.

Mr. Harvey said Flintkote is planning on entering the asbestos-cement pipe field with two new plants -- one in the East and one in the West. He added that these products would be merchandised under the brand name "Orangeburg" through the Orangeburg Manufacturing division, a leading producer of fibre and plastic pipe and conduit acquired by Flintkote in November 1958.

GREENE, TWEED & COMPANY has published a catalog and price list on Palmetto® molded packings (MP-160). This new catalog and price list opens with a twopage section devoted to Greene, Tweed's V-type packing, the Palmetto Pyramid; followed by individual page descriptions of the Palmetto: U-Ring, Kup, and Pisto-Ring.

Copies of this catalog—and related bulletins on other Palmetto molded products; Self-Lubricating, Fabric, Foil, Plastic, and Filament Packings; Gasketing and Gasketsare available from Greene, Tweed & Company, North

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### PROFILE — W. L. KEADY FIBREBOARD PAPER PRODUCTS CORPORATION



William L. Keady, President of Fibreboard Paper Products Corporation, was born in Rochester, New York, on January 5, 1894.

Following his preparatory education in public schools in Ovid, New York, Mr. Keady entered the United States Naval Academy at Annapolis. After graduation in 1916, he served as an officer in the

W. L. Keady U. S. Navy. In 1923 during his Navy assignment, he received a Masters' Degree from Columbia University. He concluded his eventful Navy career on April 1, 1924, when he resigned his commission in order

to find a place in the business world.

He started at U. S. Gypsum Company as New York Harbor Craft Repair Inspector, and one year later in July 1925, he was promoted to Superintendent, Transportation. While Superintendent, he designed and supervised construction of an ocean-going ore carrier. He was promoted to Production Manager in 1928, Vice President of Operations and Director in 1932, Vice President of Sales and Director in 1936, and President and Director in 1942.

In August, 1949, Mr. Keady resigned as President of U. S. Gypsum to become President, Director and General

Manager of Marathon Corporation.

Mr. Keady joined Pabeo Products, Inc., a leading West Coast building materials manufacturer, as President and Director in 1952. Under Mr. Keady's leadership, Pabco in 1956 purchased the other half interest in Fibreboard Products, Inc., a company which it had formerly owned jointly with Crown Zellerbach Corporation. In December. 1956, Pabco merged with Fibreboard, the largest manufacturer of paperboard, cartons and containers in the West. Mr. Keady became President and Director of the newly-enlarged enterprise, Fibreboard Paper Products Corporation.

Mr. Keady is a member of the Board of Directors of the American Trust Company, San Francisco, and Phil-



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Mr. Keady is a Director of the American Red Cross and the United Community Fund of San Francisco. He is a trustee of the San Francisco Bay Area Council and a member of the California State Chamber of Commerce.

He is a member of the Stock Exchange Club and the Pacific Union Club, both of San Francisco, and the Burlin-

game Country Club.

Mr. Keady and his wife, the former Margaret Jennings, reside at Woodside, California. They are the parents of four sons: William L.; Michael J.; Peter; and, Richard.

Completion of an expansion which doubled capacity at the Pabco Gypsum Products Plant in Newark, California, was announced by FIBREBOARD PAPER PRODUCTS CORPORATION. The expanded plant now has a production capacity of 140,000,000 square feet of one-half inch

gypsum board annually.

The expansion of Newark plant coincides with the completion of a plant for processing gypsum rock at the company's new, three-quarter billion ton gypsum deposit at Apex, near Las Vegas, Nevada. The Apex plant provides a 95% pure raw material for both the Newark plant and the Pabco South Gate Gypsum product plant and plaster mill in Southern California.

J. H. Steiner, Chairman of the Board, and K. Fred Netter, President, of SUPRADUR MANUFACTURING CORPORATION of Wind Gap, Pennsylvania, announce the acquisition of the assets, including manufacturing facilities, of the American Stained Shingle Company in Columbus, Ohio.

This constitutes the first step in Supradur's program to round out its line of building materials. Supradur is now a prime source for asbestos-cement siding and roofing shingles, cedar shakes and pre-fabricated and self-aligning cedar shake panels over insulation board with labor-saving

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By: R. M. Skinner\*

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the material's most efficient temperature range.

This was the principle behind the insulation of Cities Service Refining Corporation's Lake Charles, Louisiana, refinery, part of the recent \$22 million expansion program for enlarged production of higher octane gasolines. Here Thermalite 85% magnesia and Thermasil calcium silicate, manufactured by Baldwin-Ehret-Hill, Inc., Trenton, New Jersey, were specified for most processing towers, tanks and hot fluid lines.

Where operating temperatures exceed 550F, Thermasil, a hydrous calcium silicate compound was applied as the first layer in thicknesses that reduced the temperature at its outer surface to less than 550F. Thermalite, a molded insulating material which is most efficient between 100F and 550F was then placed as a second layer, over Thermasil. For operating temperatures below 550F, a single layer of

Thermalite was used.

Different Forms and Arrangements—While insulation types were chosen according to surface temperatures, the form and arrangement of insulating materials depended largely on the size and configuration of the equipment or pipe. In general, the contractor, Fuller-Austin Insulation Company, Houston, Texas, used half round sectional insulation on all piping up to 18-inch diameter. On pipes larger than 18-inch, a segmental form of insulation was applied; i.e., more than two segments were required to cover the 360 degree pipe surface. In both cases, joints were staggered, the material secured to the pipe by wire bands on 18-inch centers, and the insulation finished with 15-pound asphalt and .02-inch thick aluminum jackets.

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An interesting method was used to insulate the pipe line which carries residue at 220F from toppers to a lubrication oil plant. Here, one-inch by two-inch blocks of Thermalite were placed 90 degrees apart on the pipe. A two-inch layer of glass fiber insulation was placed over the blocks, leaving an air space between the fibrous felt and the blocks which provides an additional insulation. The felt was secured with wire bands and then covered with a vapor barrier of 15-pound asphalt felt. An outer jacket of 0.020-inch aluminum was secured with aluminum bands.

The block form of insulation was also used on tanks and towers. Vacuum towers were insulated with a double layer of blocks, consisting of an inner layer of Thermasil, and an outer layer of Thermalite. Asphalt felt was then applied,

and an aluminum jacket placed over it.

\*Fuller-Austin Insulation Company, Houston, Texas.

The first catalog published since the merger of Baldwin-Hill Company with Ehret Magnesia Manufacturing Corporation to form BALDWIN-EHRET-HILL, INC., contains the full line of over thirty industrial insulations manufactured by the new Corporation. Properties and specifications of the complete line of heat and cold insulations for service from sub-zero up to 1900F are presented.

Copies of the new catalog may be obtained from the Industrial Insulation Division, Baldwin-Ehret-Hill, Inc.,

500 Breunig Avenue, Trenton 2, New Jersey.

Fused Silica Fibres For Use at High Temperatures, by C. Z. Carroll-Porczynski, appeared in the March 1960 number of Engineering Materials and Design, London, England. The article is illustrated with photographs and charts.

"ASBESTOS" will be glad to lend its copy to interested readers.



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Information and samples may be obtained from your Carey Asbestos Fibre Sales Engineer or by contacting Carey-Canadian Mines, Ltd., P. O. Box 95, Lockland, Cincinnati 15, Ohio, or Carey-Canadian Mines, Ltd., East Broughton Station, P.Q., Canada.

#### NEW RESEACH DEVELOPMENT Johns-Manville Corporation

A major new research development that shows promise of opening up a market for 500,000 tons of asbestos fibre each year for use in asphalt road pavings, was recently announced by Johns-Manville Corporation, the world's largest asbestos producer.

Significance of such a market, C. B. Burnett, President, told Johns-Manville stockholders at the Company's Annual Meeting, may be measured in relation to total present production of asbestos fibre in the free world which is about 1,500,000 tons each year.

Not every type of asbestos fibre is suitable for asphalt paving applications, but the special grade of fibre required is available in quantities far exceeding present demand. Large quantities of the desired grade also can be produced at reasonable cost at the large, integrated mining and milling operations of Johns-Manville at the Jeffrey Mine in Quebec.

Dr. C. F. Rassweiler, Vice President for Research and Development, reported that Johns-Manville, in co-operation with Federal, State and Municipal Highway Departments and private contractors, has assisted in the laying of 18 test strips, subject to typical vehicular traffic, in 8 states and the Province of Quebec, Canada. Highway specialists have been so impressed by results to date, that on their own initiative they are introducing asbestos-asphalt mixes on an experimental basis as part of their current paving projects.

An asbestos-asphalt service road, on Johns-Manville property in Quebec, Canada, was installed in 1953, and for 6 years was subjected to extremely punishing service by heavily laden ore trucks, in weather conditions highly damaging to conventional pavings. Adjacent asphalt paving, without asbestos fibre, has required costly maintenance compared with the six years of virtually maintenance-free performance by the asbestos-asphalt test strip.

One of the effects of adding asbestos fibre is to allow use of additional amounts of asphalt, an extremely desirable factor according to highway engineering experts.

#### A natural fire barrier as workable as wood

A unique insulation board. workable as wood, Asbestolux combines more inherent advantages than any similar material. Long-fibered Amosite asbestos and a selected grade of silica with special properties are bonded under heat and pressure. Light and strong, Asbestolux is incombustible, and stable.

Write for Bulletin J-850.



# **ASBESTOLUX**

FIREPROOF INSULATION BOARD



in the United States

NORTH AMERICAN ASBESTOS CORPORATION

Board of Trade Building • Chicago 4, Illinois



In Canada
CAPE ASBESTOS (CANADA) LIMITED

200 Bloor Street East • Toronto, Ontario

Subsidiaries of The Cape Asbestos Company, Ltd., London

## SCANDINAVIA BELTING COMPANY Changes Name

Scandinavia Belting Company, manufacturers of textile belting, automotive and industrial brake linings for over forty years, has changed its name to Scandura, Inc., it was announced by C. B. Whitley, Vice President and General Manager of the Company.

Decision to change the name of the Charlotte, North Carolina corporation was based upon the wide acceptance of its Scandura trademark for conveyor belting by industry in general, and a desire for a shorter name, it was stated.

Sales Managers for the Company are T. James Montgomery of the Industrial Division, and A. E. Daly of the Automotive Division. Both men have been associated with

the Company for many years.

Scandura, Inc. maintains branch offices at Cleveland, Ohio, and Newark, New Jersey; and, warehouses at Cambridge, Massachusetts, Indianapolis, Indiana, Newark and Cleveland.

TURNER BROTHERS ASBESTOS COMPANY LIMITED of Rochdale, England, has recently published an interesting and descriptive booklet, with illustrations, on its asbestos millboard.

Copies may be obtained from "ASBESTOS", 807 Western Saving Fund Building, Philadelphia 7, Pa.

#### POLYREZ® COMPANY, INC.

Woodbury,

New Jersey (USA)

Manufacturers of Phenolic Resins, Particularly for Friction Materials.

#### **QUALITY-CONTROLLED...**



Flintkote's modern research center at Whippany, New Jersey provides the facilities and technical know-how to determine the right fibres for diversified product uses.

# ...FLINTKOTE Asbestos Fibres

You, too, can gain from experience. The Flintkote Company stresses quality—has manufactured quality products for over fifty years—uses quality-controlled asbestos fibres produced by Flintkote Mines in many of its products.

A wide variety of asbestos fibres now available for *your* use.

For further information and descriptive brochure – Write: The Flintkote Company, East Rutherford, New Jersey.

# FLINTKOTE MINES, LIMITED

(Subsidiary of The Flintkote Company) Thetford Mines, P. Q., Canada



#### **AUTOMOBILE SALES**

			Feb										b.	ruary 1960										
Passenger Cars		0			0	0	0			9	9								0	0	0	0		656,579
Motor Trucks					0											0		0						125,938
Motor Coaches									0					0		0	0	0	۰		0			241

782,758

In February 1959, a total of 577,093 motor vehicles were sold. In the two months of 1960 the total was 1,575,109.

These figures were supplied by the Automobile Manufacturers Association, New Center Building, Detroit, Michigan.

LAKE ASBESTOS OF QUEBEC, LIMITED, which operates the recently opened \$36 million asbestos property at Black Lake, Quebec, Canada, will display a range of its chrysotile ore and fibre and examples of new end uses at the *Design Engineering Show*, to be held at the New York Coliseum, May 23-26, 1960.

A wide variety of new applications in many industries has been developed recently for high quality chrysotile fibre: the kind produced by the Black Lake ore body. The display will include samples of fibre ranging from Grades 3 through 7.

Lake Asbestos, a wholly owned subsidiary of American Smelting and Refining Company, will occupy Booth 914 in the Asarco exhibit.

# ASBESTOS FIBRES ASBESTOS WASTE

Frank G. Ruggles Co. Inc.

NEW YORK 4, NEW YORK

# Specify UNARCO

#### FOR INSULATION THAT ALWAYS PAYS OFF

UNIBESTOS, the Amosite Asbestos Pipe Covering and Block

Calcium Silicate Pipe Covering and Block

85% Magnesia Pipe Covering and Block

Mineral Fiber Block

Slip-On Insulation

Wrap-On Insulation

Lace-On Insulation

**Turbine Blankets** 

Specially Fabricated Insulations

**Insulating and Finishing Cements** 

**Protective Mastic Coatings** 

**Asbestos Textiles** 

Packing and Gasketing

**U-200 Low Temperature Insulation** 

Write for Complete Information on Any Product

#### UNION ASBESTOS & RUBBER COMPANY

1111 W. Perry Street, Bloomington, Illinois
Over 30 years of specialization in quality asbestos products

#### MARKET CONDITIONS

GENERAL BUSINESS.

General business shows signs of slacking off in some areas. Steel production is lower, car production has been cut back and on the broader scale total unemployment has risen recently and gross national product rate has dropped slightly. All sorts of reasons can be advanced to explain these indications of a downward trend in the general economic picture. Some economists feel that we are going through a complete reversal of the previous uptrend and entering a long term downtrend while others see the current period as one of temporary readjustment and consolidation from which a resumption of the long term uptrend can be expected in the very near future. We believe the latter group to be in the majority at the moment and of course hope their position proves correct.

#### ASBESTOS-RAW MATERIAL.

First quarter asbestos fibre shipments for the Industry ran approximately 10% ahead of the same period last year. This trend should continue during 1960.

With the opening of navigation, export fibre shipments have now reached their normal level and it is expected will surpass those of 1959.

#### ASBESTOS-MANUFACTURED GOODS.

Asbestos Textiles. The present Market Situation is somewhat below capacity but improvement is expected as the year progresses.

Ashestos Brake Lining. Both replacement and equipment sales are running ahead of the same period for 1959. Replacement should continue to be excellent. Equipment companies are still weighing how much the impact of "compacts" will cut into the normal size car market.

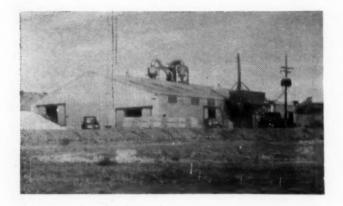
Asbestos Paper. Orders for this product have been slowing down for the past sixty days due to the curtailing of many activities where Asbestos Paper is used. Orders for the balance of 1960 will depend entirely upon the overall national economy since so much of this type of material is

#### ARIZONA ASBESTOS

Mined and Milled by

#### JAQUAYS MINING CORPORATION

1219 S. 19th Avenue PHOENIX, ARIZONA



Producers of Low Iron Chrysotile Crudes and Filter Fibre

MINES AND MILL IN GILA COUNTY

"ASBESTOS" - May 1960

Page 31

used as a component of other products which have been slowed down. There is hope that this condition will change at mid-year. Orders for Asbestos Millboard have slowed down seriously during the past thirty days and it is difficult to tell whether this is a temporary or permanent trend based upon the uses for this material. The use of Asbestos Saturated Paper has increased during 1960 and is expected to continue in the upward trend for the rest of the year.

Asbestos-Cement Products. The present Market Situation is beginning to reflect the usual Spring upturn. The outlook for the balance of the year should be fairly good, subject to a considerable degree to the number of housing starts and the level of construction in general.

High Pressure Insulation. The Market Situation at the present time continues extremely competitive, both from a manufacturing level as well as a contractor's level for the available business. The outlook for the remainder of 1960 appears favorable but is entirely dependent upon an increase in the level of industrial construction.

Low Pressure Insulation. At the present time, orders for this material are beginning to increase over the past month due to the change in the weather in certain locations of the country. Good weather conditions for building have made it possible to proceed with many jobs which have been in progress and were actually slowed by the unfavorable weather throughout various parts of the country. The remaining months of this year should be about equal to those of 1959.

Shingles—Roofing & Siding. The Market Situation at the present time is good and business for the rest of the year should equal that of 1959.

Asbestos Pipes. The present Market Situation is reasonably satisfactory considering the season. The outlook for the rest of the year remains somewhat uncertain due to the changing and conflicting situation with regard to housing starts. It is expected that the year will be reasonably good.

The above comments have been made by various informed executives in the Industry. All comments are welcome.



Fully automatic plants to make Socketed Pipes

Plants for making Asbestos Cement Pipes for OIL PIPELINES

Modern plants for making Asbestos Cement corrugated, Bat and flexible SHEETS

Automatic corrugating and stapling machines

Presses up to 10,000 tons pressure

Plants to make Shingles

Plants for making SILICA CEMENT Steam Hardening

diam't

#### ASBESTOS CEMENT ENGINEERING

VADUZ LIECHTENSTEIN (Switzerland) P. O. Box 34,649

PLANTS PROJECTED DELIVERED AND STARTED - PARTICIPATIONS
TAKEN - FINANCING ARRANGED - AGENTS REQUIRED

#### BUILDING

Contracts for highways and non-residential building construction were up sharply in March, F. W. Dodge Corporation, construction news and marketing specialists, reported, but these gains were more than offset by declines in most other construction categories.

Total contracts for future construction in the United States (except Alaska and Hawaii) in March amounted to \$3,046,345,000, down 9 per cent from the same month last year. Dodge economists pointed out, however, that after adjustment for normal seasonal factors, the March figures showed some improvement over the two previous months as the Dodge Index of construction contracts rose to 252 from a level of 234 in February and 235 in January (1957-49=100).

Contracts for non-residential buildings in March totalled \$1,067,460,000, up 17 per cent from March 1959. Sharp gains were registered for manufacturing buildings, schools, and public buildings, while commercial buildings were up slightly.

Despite the sharp gain in highway contracts, total heavy engineering contracts in March fell 23 per cent from a year ago to \$685,278,000. Chief reason for the decline was a severe drop in contracts for electric light and power systems from the extremely high levels of March 1959.

Residential building contracts in March amounted to \$1,293,607,000, down 16 per cent from a year ago. The number of dwelling units represented by the residential contracts in March totalled 98,537, a drop of 19 per cent from the same month last year.

Cumulative totals of construction contracts for the first quarter of 1960, with percentage changes from the corresponding period last year, were as follows: non-residential building at \$2,557,957,000, up 5 per cent; residential building at \$3,199,669,000, down 12 per cent; heavy engineering at \$1,700,065,000, down 10 per cent; and total construction at \$7,457,691,000, down 6 per cent.



### asbestos cement department

10, VIA SANTA TERESA TURIN, ITALY

Manufacturers of all types
of
Fully Automatic

asbestos cement machinery

Daily output guaranteed according to the International Standard Specification: 150 ton high pressure pipes 300 ton flat and corrugated sheets

### NEW J-M ASBESTOS PLASTIC-FELT Forms Vital Parts for Rockets and Missiles

A newly developed moulding compound offers numerous advantages in the production of components that must withstand tremendous heat and pressure. It also offers maximum resistance to flame erosion in high-temperature service, such as aviation, rocket, and missile applications. Thermomat, a Johns-Manville product, is composed of a non-woven asbestos felt saturated with a thermo-setting phenolic resin and an inorganic filler, and is furnished in sheet form for easy one-piece lay-up.

As supplied for fabrication, the partially-dried slabs of Thermomat are extremely comformable and allow convenient one-man lay-ups. Random fiber dispersion provides maximum reinforcement to the cured Thermomat, yet allows easy working together of joints and seams and free flow of material during the moulding operation.

Flexible before curing, tough and rigid after cured, Johns-Manville Thermomat is extremely resistant to high temperatures and offers exceptional resistance to physical abrasion and erosion during the ablation process. In a typical missile application, Thermomat, fabricated in a 1/8-inch thickness, protected the metal casing of a solid fuel compression chamber operating at 5000°F for approximately 90 seconds, in an area with no flame erosion. Typical physical properties of Thermomat Style 179, cured as directed, indicate a density of 106 pounds/cubic foot, shear strength of 20.300 psi, tensile strength 15,474 psi, and an ultimate flexural strength at 25,300 psi.

Thermomat is available in a variety of styles, with varying resin, asbestos fiber, and additive contents to allow fabrication of components with the final properties desired for specific application. Thermomat is available in slabs 14-inches wide, approximately 12-feet long, and 3/16th-inch thick. Additional data is available from Johns-Manville, 22 East 40th Street, New York 16, New York.



Modern equipment in the world's largest asbestos mill



and 600 skilled workers

### ... make J-M Asbestos Fibre the dependable ingredient in the batch

Adjoining the world's largest asbestos mine at Asbestos, Quebec is Johns-Manville's new asbestos mill. Here the highly skilled asbestos workers use the latest equipment to blend ingredients.

This huge mill with its modern high-speed equipment also provides a unified control of production to assure uniformity, correct grading and maintenance of quality standards.

To learn why Johns-Manville is best equipped to serve your asbestos fibre needs, write Asbestos Fibre Division, Canadian Johns-Manville Co. Ltd., Box 1500, Asbestos, P. Q., Canada: Tel.—100

JOHNS-MANVILLE

100 YEARS OF QUALITY PRODUCTS... 1858-1958





#### AFRICA (Rhodesia)

(Published by Rhodesia Chamber of Mines)

Tons 2,000 lbs.

Production	for	Decei	mber	1959	 	8,406.57
Valued at					 2	532,839.00
Production	for	Decei	mber	1958	 	9.885.99
Valued at					 2	659,093.00
Production	for	1959			 	119,699,46
					£	
Valued at					 2	8,593,726.00

#### CANADA

(Dept. of Mines, Province of Quebec)

Tons 2,000 lbs.

Production for February	1960 (Quebec)	61,912
Other Provinces		5,718

67,630

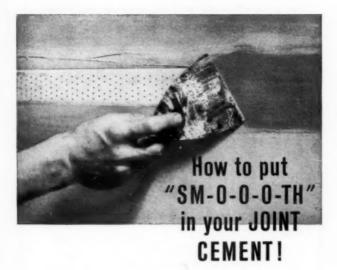
Total production for February 1959 was 60,084 tons.

### CANADA'S MINERAL PRODUCTION Preliminary Report — 1959

A new high was reached in 1959 in the Canadian mineral industry when the value of mineral commodities exceeded \$2.4 billion according to a preliminary estimate prepared by the Dominion Bureau of Statistics at Ottawa. There was an increase of 13.7% above the value of \$2,100,739,038 in 1958. Asbestos showed a gain in value of \$14 million.

Non-metallic minerals increased in value in 1959 to \$176 million compared with \$150 million in 1958. A million tons of asbestos were valued at \$106.6 million.

Preprints of the Asbestos Chapter from the 1960 edition of Mineral Facts and Problems are now available from the Superintendent of Documents, Government Printing Office, Washington 25. D. C. (Price: 10¢ in coin).



It's the asbestos "floats" in this joint cement that give it such a smooth, grit-free finish. These feather-light fibres of Gold Bond asbestos give all joint cements smoother working qualities, eliminate streaks in the finished job.

Gold Bond asbestos "floats" work wonders in Gold Bond joint cement - why not try it in yours? Write for information to National Asbestos Mines, Ltd., Thetford Mines, P. Q., Canada (Subsidiary of National Gypsum Company.)

a step ahead of tomorrow Gold Bond INDUSTRIAL PRODUCTS





### Imports Into U.S.A.

(Figures by Bureau of Census)

Unmanufact	ured Asbe	estos: Decemb Tons (2.5	
E	a-		
From: Cana			41,705
		h Africa	2,802
			892
			624
Aust		* * * * * * * * * * * * * * * * * * * *	571
Unite	ed Kingdo	m	123
Moza	mbique		71
Othe	r Countri	es	60
			46,848
	1	Valued at:\$	5,082,101
By Grades:			
Crude.	Other.	Chrysotile, Canada	133
Crude.	Other.	Chrysotile, Yugoslavia	892
Crude.	Other.	Chrysotile, Mozambique	71
Crude,	Other.	Chrysotile, U. of S. Africa	250
Crude,	Other.	Chrysotile, Rhodesia (Ny)	261
Crude.	Other.	Chrysotile, Other Countries	4
Crude.	Blue.	Australia	571
Crude,	Blue.	Union of South Africa	575
Crude.	Amosite.	Union of South Africa	1.876
Textile	Fiber.	Chrysotile, Canada	1,348
Textile	Fiber.	Chrysotile, United Kingdom	123
Textile	Fiber.	Chrysotile, Rhodesia (Ny)	183
Textile	Fiber.	Chrysotile, Other Countries	56
Shingle	Fiber.	Chrysotile, Canada	4,329
Shingle	Fiber.	Chrysotile, Rhodesia (Ny)	180
Paper	Fiber,	Chrysotile, Canada	3,991
Other	Fibers.	Chrysotile, Canada	31.904
Other	Fibres.		101
Other	ribres,	Chrysotile, U. of S. Africa	101
			46,848

Manufactured Asbestos Goods:		December	1959		
	Qua	lity (lbs.)	7	Value	
Asbestos Yarn					
Canada		20,986	\$	14,721	
United Kingdom		29,644		19,166	
Other Countries		10.314		9.115	

150

used in Asbestos Industry

Bauer

Specific Gravity Separators



Asbestos processing plants are using 150 Bauer Specific Gravity Separators for cleaning fiber. The machines are available in two sizes with 1 to 5 T/hr. capacity.

They require less air than other types of cleaners.

They handle Nos. 4 to 8 fibers.

The separators remove small grit, rock particles, blasting wire, wood particles, and many other kinds of debris. Ask for particulars.

### THE BAUER BROS. CO.

1826 Sheridan Ave. . Springfield, Ohio

Canadian Agents: — Lynn Macleod Engineering Supplies, Ltd., Thedford Mines, Quebec.

Export Agents: — M. Neumunz & Son, Inc., 90 West St., New York 6, N.Y.

Asbestos Packing 28,223	8,609
Asbestos Shingles (Impreg.)	
Belgium 93,762	14,772
Other Countries 37,469	5,101
Asbestos Shingles (Not Impreg.)	
Canada 194,644	10,527
Belgium	95,465
Italy	113,824
Other Countries	6,813
Asbestos Manufactures—Others	4,326
4,335,173	\$302,439

#### IMPORTS OF ASBESTOS BY UNITED KINGDOM

Tons 2,240 lbs.							1	F	eb	T	18	ary	1966
From: Union of South Africa													2,519
Basutoland, Bechuanal	and &	Sw	az	la	ne	d							897
Rhodesia & Nyasaland													3,448
Canada									×				1,31
Other Commonwealth	Count	ries											
and Irish Republic													
Foreign Countries													35
			*										
													0 90

Japan—Asbestos is mined almost exclusively in Hokkaido, although it occurs in several other areas in Japan. The Hokkaido deposits of the Yamabe District are chrysotile. Some amphibole has been produced in the past, particularly in Kyushu. The output of asbestos (all chrysotile) during the first 6 months of 1959 consisted of 5,823 metric tons. Output in 1958 (all chrysotile) totalled 10,149 tons, compared with 11,968 tons, consisting of 11,352 tons of chrysotile and 616 tons of amphibole in 1957.

#### BRAZILIAN PRODUCTION

S. A. Mineracao de Aminato, which operates a chrysotile asbestos mine at Djalma Dutra (formerly Pocoes) in the State of Bahia, produced 1,882 metric tons of chrysotile asbestos in 1959, compared with 1,545 tons in 1958. Shipments of asbestos in 1959, all to Brazilian ports, totaled 1,853 tons. Comparable shipments in 1958 totaled 1,534 tons.

# ASBESTOS FIBRE OF ALL TYPES

### BRANDHURST COMPANY LIMITED

Vintry House LONDON E. C. 4

Telephone:
London Central 1411
(Private Branch Exchange)

Cables: Brandcolim London

### Exports From U.S.A.

(Figures by Bureau of Census)

Unmanufactured Asbestos: Year 1959	1
Tons (2,240 lbs.)	Value
To: Europe 2,379 \$	484,198
South America	46,042
Canada 369	104,322
Central America & Mexico 299	37,276
United Kingdom 144	15,040
Other Countries 294	76,410
3 955 \$	763 288

Manufactured Asbestos Goods:

	Yea	r 159
	Quantity	Value
Asbestos Cement & Pipe Coverings Lbs.	4,828,743	\$ 1,081,061
Asbestos Textiles & YarnsLbs.	691,357	721,854
Asbestos PackingsLbs.	1,635,349	2,090,809
Asbestos Clutch Facing	1,427,059	1,139,154
Asbestos Bk.Lng. (Mld.&S.Mld.) Lin. Ft.	1,553,704	651,583
Asbestos Brake Lining, Other Lbs.	5,389,774	4,022,404
Asbestos Construction Materials Lbs.	22,062,491	2,423,793
Asbestos Manufactures — Others		771,660

\$12,902,318

Lyle Gelb, Supervisor at the Redwood City Roofing Plant of FIBREBOARD PAPER PRODUCTS CORPORATION, has been promoted to the position of Plant Manager, it was recently announced by Ralph E. Heim, Roofing Division General Manager.

Mr. Geib, who has served in various supervisory positions at the plant since 1947, succeeds Frank W. Wood who recently was reassigned as Manager of Fibreboard's Portland Roofing Plant.

"Tropag

.

Importers since 1909 of

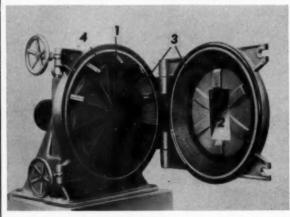
ASBESTOS-ORES-MINERALS

Ballindamm 6

New From Europe . . . .

Finding increasing use in North America . . . .

## FOR MAXIMUM PRESERVATION OF FIBER LENGTH IN MILLING AND UPGRADING ASBESTOS PALLMANN TURBO-FIBERIZER



The Turbo-Fiberizer is an impact mill with a high velocity of air traveling through the fiberizing chamber. A rotor (1) at 2700 RPM throws asbestos entering through the chute (2) against two fixed cones. (3). A high velocity of air carries fibers through an annular gap (4) into a fan chamber.

Wearing inserts are a high chrome-moly alloy. On grade 4, production is 5 tph.

The mill is used on Canadian, Arizona and California asbestos, grades 3-7. It is used also on scrap.

Test your asbestos at our test facilities.

### PALLMANN PULVERIZERS CO.

315 Newark Street

Hoboken, New Jersey

### Exports From U.S.A.

(Figures by Bureau of Census)

Unmanufactured Asbestos:		January 19	60
	Tons	(2,240 lbs.)	Value
To: Europe		183 \$	33,356
Central America & Mexico		50	2,605
South America		18	2,590
Other Countries		117	23,793
		368 \$	62,344

Manufactured Asbestos Goods:

	January	y 1960
	Quantity	Value
Asbestos Cement & Pipe Coverings Lbs.	471,805	\$ 85,978
Asbestos Textiles & YarnsLbs.	45,339	51,337
Asbestos PackingLbs.	126,611	174,858
Asbestos Clutch Facings	148,406	130,344
Asbestos Bk.Lng.(Mld.&S.Mld.) Lin. Ft.	163,558	80,242
Asbestos Brake Lining, OtherLbs.	340,568	248,500
Asbestos Construction Materials Lbs.	618,521	133,210
Asbestos Manufactures — Others		77,287
	,	

\$ 981,756

C. Fred Workman was appointed to the position of Merchandising Manager, Insulation Sales in KEASBEY & MATTI-SON COMPANY'S Industrial Division. This announcement was made by Norman L. Barr, Vice President—Sales.

Mr. Workman had previously been a salesman in the Company's Houston, Texas, district office and has had long experience selling to the oil and petro-chemical industries in the Southwest. His new assignment embraces wide-scale promotion of K&M insulations.

John Prechek, District Sales Manager, KEASBEY & MATTI-SON COMPANY, Ambler, Pennsylvania, will direct the new Los Angeles district office in the new Miller Building, 5710 Manchester Avenue, Los Angeles 45, California.

Mr. Prechek joined K&M as a salesman in the Company's San Francisco district office in 1955, and was named Assistant District Sales Manager in 1958.

K&M asbestos-cement pipe products have been manufactured on the West Coast since 1953 when Keasbey & Mattison opened its large, modern plant at Santa Clara, California. Series 40 Entoleter CentriMil® has capacity in excess of 20 tons per hour when releasing crudy, or fiberizing 6 tons per hour.

DON'T

ERUSH

POTENTIAL

PROFITS:

### MODERN CENTRIFUGAL IMPACT MILLING

- Reduces rock, releasing fiber intact
- Has increased yield as much as 15%
- Boosts both value and volume of output
- Requires less power per ton
- Constant product from start-up to shut-down

The rugged Entoleter Centrifugal Impact Mill is specially engineered to break open rock along natural cleavage lines liberating crudy asbestos with minimum degradation of fiber. Its superiority over conventional methods has been production proven.

The same impact principle at higher velocities is used for fiberizing without degradation. Write for details. Free sample processing is available in the Entoleter Development Laboratory.



### ENTOLETER DIVISION

P. O. BOX 90.

NEW HAVEN 4, CONN.

PRISON COMPRESSING COMPORATION ENTOLETER BIVISION ELECTRICAL DIVISION

SAFETY RAILWAY SERVICE COMPORATION

AUTOMATIC TIMMS & CONTROLS, MC THE NOWE SCALE COMPANY SI MANDLING SYSTEMS

IN CANADA: LYNN, MACLEOD ENGINEERING SUPPLIES, LTD., THETFORD MINES, P. Q., CANADA

### Exports From Canada

#### (Published by Dominion Bureau of Statistics)

Unmanufactured Asbestos:	January	196	30
	Tons (2,000 lbs.)		Value
Crude			
United States		\$	5,320
United Kingdom			
South America			
Central America & Mexico			
European Countries			
Other Countries			
	7	8	5,320
Milled			
United States	1,402	\$	609,141
United Kingdom	40		15,437
South America	123		38,720
Central America & Mexico			
European Countries	439		187,081
Other Countries	124		50,493
Shorts	2,128	8	900,872
	11 000	0.4	051500
United States		\$1	1,954,500
United Kingdom			166,296
South America			108,511
Central America & Mexico			69,086
European Countries		ı	,368,635
Other Countries	3,741		653,028
	25,035	\$4	,320,056
Grand Total—			
Unmanufactured Asbestos:	27,170	\$5	5,226,248
Manufactured Asbestos Goods:			
Brake Lining	*******	\$	36,115
Packing			
Other Materials	******		13,135
,			

### WILHELM BURGDORF

Importer of Raw Asbestos
P. O. Box 1131, BREMEN, GERMANY

Now in Operation: New Independent Source of Asbestos. Lake Asbestos of Quebec, Ltd. will supply 100,000 tons of high-quality chrysotile asbestos fibre annually. If you need a new dependable source for high grade asbestos, write to Lake Asbestos of Quebec, Ltd., 120 Broadway, N.Y. 5, N.Y.

North American Sales Agents:

California, Los Angeles
E. B. Taylor Company
California, San Francisco
E. M. Walls Company
Colorado, Deaver
Braun-KnechtHeimann Co.
Hilinois, Chicago
Central Solvents &
Chemicals Co.
Indiana, Indianapolis
& Ft. Wayne
Hoosier Solvents &
Chemicals Corp.
Kentucky, Losisville
Dixie Solventa &
Chemicals Co.

Massachusetts, Allston D. H. Litter & Co., Inc. Michigan, Detroit Baker & Collinson Missouri, Kansas City & St. Louis Missouri Solvents & Chemicals Co. New York, Buffalo Buffalo Solvents & Chemicals Corp. New York, New York D. H. Litter & Co., Inc. Ohio, Cincinnati Ameco Solvents & Chemicals Co.

Ohio, Cleveland
A. C. Mueller Co., Inc.
Oregos, Portland
Yan Waters & Rogers, Inc.
Pennsylvania,
Conshohocken
Yan Horn, Metz & Co., Inc.
Texas, Houston
Federated Metals Division
Utah, Salt Lake City
Braun-KnechtHeimann Co.
Washington, Seattle
Yan Waters & Rogers, Inc.
Wisconsin Solvente &
Chemicals Corp.

### LAKE ASBESTOS OF QUEBEC, LTD.

a subsidiary of American Smelting and Refining Company



### **NEWS OF THE INDUSTRY**

#### HAPPY BIRTHDAY

E. R. Stevens, Executive Vice President, Baldwin-Ehret-Hill, Inc., Trenton, New Jersey, April 25.

John L. Anderson, Vice President, Asbestos Products, Inc., St. Paul, Minnesota, May 15.

John J. Dempsey, President, Armor Products, Inc., New York

City, May 18.
Clifford F. Rassweiler, Vice Chairman of the Board, Research & Development, Johns-Manville Corporation, New York City, May 18.

Robert A. Schneider, Vice President-Engineering, Keasbey & Mattison Company, Ambler, Pennsylvania, May 21.

William J. VanAkin, Vice President of Manufacture, The Ruberoid Co., New York City, May 23.

Charles J. Clark, Vice President, Asbestos & Magnesia Materials Company, Chicago, Illinois, May 25.

W. S. Lang, Vice President, Magnesia-Asbestos Insulation Company, Inc., New York City, May 25.

Stephen Harrison, Owner, Asbestos Service Company, Youngstown, Ohio, May 26.Geo. V. Hamilton, Owner, Geo. V. Hamilton Company, Pittsburgh,

Pennsylvania, May 26.

A. J. McMullen, President, The Garlock Packing Company, Palmyra, New York, May 27.

J. H. Mooney, Vice President, Johnson's Company, Thetford Mines, Canada, May 27.

Giles Newton, Chairman, Cape Ashestos Company Limited, London, England, May 27.

Harry C. Templeton, President, Drycor Felt Company, Staffordville, Connecticut, May 29. George A. Gelish, President, Port Asbestos Insulation Company,

Brooklyn, New York, June 1.

Chas. H. Jackson, President, Atlas Asbestos Company Limited, Montreal, Canada, June 2.

Phil. Ziegenfuss, President & Treasurer, Insulating Materials Company, St. Louis, Missouri, June 2.

Norman C. Naylor, Director, Union Asbestos & Rubber Company, Chicago, Illinois, June 3. Ford G. Brown, Secretary-Treasurer, MacArthur Company, St.

Paul, Minnesota, June 5. Edward J. Ewald, Vice President, Standard Asbestos Manufactur-

Edward J. Ewald, Vice President, Standard Asbestos Manufacturing Company, Chicago, Illinois, June 6. E. M. Railton, Vice President—Charge of Western Division, The

Ruberoid Co., Chicago, Illinois, June 8.

H. E. Howell, Vice President, Baldwin-Ehret-Hill, Inc., Trenton, New Jersey, June 8.

### BELL ASBESTOS MINES LTD.

THETFORD MINES, QUE.
CANADA



Producers of
Raw Asbestos Crudes
& Fibres



Sales Representatives

for

Cassiar Asbestos Corporation Limited

Manley Alsaker, Branch Manager, Kelley Asbestos Products Company, Omaha, Nebraska, June 9.

Herbert Morton Ball, Secretary & General Attorney, Johns-Manville Corporation, New York City, June 9.

Walker Jamar, President, Walker Jamar Company, Duluth, Minnesota, June 11.

Howard Snow, President, Southern Friction Materials Company, Charlotte, North Carolina, June 11.

To all these gentlemen we extend congratulations and best wishes on the occasion of their birthdays.

### ASBESTOS CORPORATION LIMITED Annual Report

Net income for the Asbestos Corporation Limited for the year 1959 totalled \$3,057,379 or \$1.69 per share, compared with

the 1958 figures of \$4,134,769 and \$2.29 per share.

As predicted in last year's report, 1959 was in many ways a difficult year, but in spite of this there was a modest increase of 3% in the volume of sales over 1958. This minor improvement was achieved in the face of severe competition from within the Canadian industry itself and also, as has been the case for a number of years now, from foreign fibre.

As forecast in the 1958 report, there was some curtailment of production at the Company's mining properties. The Normandie Mine operated at full capacity through the year but on the other hand, the British-Canadian Mine was shut down for two months and the King-Beaver worked at only 68% of its

capacity.

For reasons of health, Mr. H. P. Thornhill and Mr. F. E. Notebaert resigned from the Board during the year. Mr. Thornhill had been a director since 1932 and Mr. Notebaert since 1944. Mr. A. M. Campbell, Executive Vice-President of the Sun Life Assurance Company of Canada, and Mr. Edward C. Wood, President of the Imperial Tobacco Company of Canada Limited, were appointed to the Board to fill these vacancies.

#### THE GARLOCK PACKING COMPANY Annual Report

An increase of 26% in sales volume earned The Garlock Packing Company \$1.720,619, or \$3.49 a share, on sales of \$33,470,570 during 1959 according to the annual report released recently. This compares with 1958 sales of \$25,446,230 and earnings of \$701,453, equal to \$1.42 per share.

In the "Letter to Stockholders", Board Chairman R. M. Waples and President A. J. McMullen described the past year

as "one of significant progress for the company".



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### **RAW ASBESTOS**

ALL GRADES-ALL TYPES

### C. J. PETROW & COMPANY (PTY.)

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VOLKSKAS BLDG. — 76 MARKET STREET

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### ASBESTOS CEMENT MACHINERY

Our experienced engineers and machinists offer the industry entire machines built to deliver maximum production.

Your Inquiries Are Invited

1-51 Paterson Avenue

E. Rutherford, N. J.

#### CURRENT RANGE OF PRICE

As of May 10, 1960

ARIZONA— Per Ton of	2,000 lbs., f.	o.b. Glo	obe,	Arizona
No. 1 Crude (soft)		.475.00	to	\$1.800.00
No. 2 Crude (soft)		830.00	to	1,050.00
Group-3 (Filtering & Spinning)		350.00	to	450.00
Group-4 (Plastic & Filtration) .		190.00	to	250.00
Group-5 (Plastic & Moulding) .		125.00	to	177.00
Group-7 (Refuse & Shorts)		60.00	to	100.00
CANADA—	Per Ton 2,	000 lbs	. f.c	o.b. Mine
	Canad	ian Cu	rre	ncy
Group No. 1 (Crude No. 1)	\$1	,410.00	to	\$1,475.00
Group No. 2 (Crude No. 2); Crud	de			
Run-of-Mine and Su	ndry	610.00	to	875.00
Group No. 3 (Spinning Fibre)		350.00	to	
Group No. 4 (Shingle Fibre)		180.00	to	245.00
Group No. 5 (Paper)		120.00	to	150.00
Group No. 6 (Waste, Stucco or F	Plaster)			86.00
Group No. 7 (Refuse or Shorts)		40.00	to	80.00
VERMONT—Per ton of 2,000 lbs. Vt.	f.o.h. Hyde P	ark or	Mo	rrisville,
Group No. 3 (Spinning & Filteri	ng)\$	353.00	to	\$ 440.00
Group No. 4 (Shingle Fibre)		181.00	to	218.00
Group No. 5 (Paper Fibre)		120.00	to	142.00
Group No. 6 (Waste, Stucco or I	Plaster)			86.00
Group No. 7 (Refuse or Shorts)		41.00	to	75.00

H. W. Muter has been appointed Vice-President and General Manager of THE FLINTKOTE COMPANY OF CANADA LIMIT-ED, Toronto. This announcement was made by R. G. Wace, Vice-President of Flintkote in charge of Canadian operations. Mr. Muter joined Flintkote as Manufacturing Manager in

1945 and became General Manager in 1952.

### PHILLIPS ASBESTOS MINES

Producers of CRUDES and

#### FIBERIZED ASBESTOS The World's Finest Fibres

DRAWER 71

GLOBE, ARIZONA

Mines and Mill: in Gila Co., Arizona

### **RAW ASBESTOS DISTRIBUTORS**

LIMITED

FOR CANADIAN, RHODESIAN AND SOUTH AFRICAN ASBESTOS

ASBESTOS HOUSE + 77-79 FOUNTAIN ST. + MANCHESTER 2
E N G L A N D

#### ASBESTOS STOCK QUOTATIONS

(These figures are compiled from the Commercial & Financial Chronicle. No guarantee as to their correctness.)

		April 1960		
	Par	Low	High	Last
American Brake Shoe	np	40%	46%	42
Armstrong Cork (Com)	1	401/2	45%	41 %
Armstrong Cork (Pfd)	np	781/2	81	80
Asbestos Corporation	np	221/2	26	25
Philip Carey	10	29%	3134	293/4
Cassiar Asbestos Corp	np	12	13	121/2
Celotex (Com)	1	32	33	321/8
Celotex (Pfd)	20	181/8	18 7/8	181/2
Certain-Teed	1	12	131/4	12%
Fibreboard	np	341/4	40	35
Flintkote (Com)	- 5	33 1/8	381/4	33 1/8
Flintkote (Pfd)		821/2	86	86
Johns-Manville	_	531/8	56 %	551/2
National Gypsum (Com)	1	541/2	581/4	551/4
National Gypsum (Pfd)		89	921/6	89
Porter, H. K.		891/2	921/6	901/2
Raybestos-Manhattan		65 1/4	70	681/4
Ruberoid		385%	4014	385%
Unarco		8 7/8	10%	8 7/8
United Asbestos	1	\$3.55	\$3.95	\$3.75
U. S. Gypsum (Com)		97	105	1021/4
U. S. Gypsum (Pfd)		1501/2	154	154
U. S. Rubber (Com)		49 %	551/4	50
U. S. Rubber (Pfd)		146%	1491/2	148

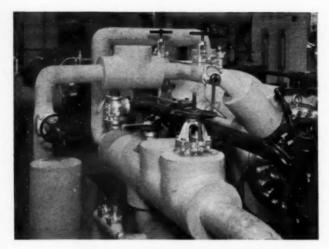
Robert M. LaBolteaux has been appointed Assistant Advertising Manager of THE PHILIP CAREY MANUFACTURING COMPANY, Cincinnati, Ohio. This announcement was made by John C. Thomas, Advertising Manager.

In his new position, Mr. LaBoiteaux will be in charge of specific advertising, promotion and publicity projects for Carey and its subsidiary companies, major manufacturers of roofing, siding, insulation, bathroom cabinets, range hoods and ventilating fans.

Ralph E. Frank has been promoted to the new position of General Products Manager, NATIONAL GYPSUM COMPANY, it was recently announced by Fred A. Manske, President.

Before assuming his present position, Mr. Frank served two years as Division Products Manager.

He is a graduate of Leroy High School and Syracuse University.



### Maximum control of temperatures with PABCO PRECISION-MOLDED CALTEMP a Calcium Silicate Insulation

Curb expensive heat loss, control temperatures within minimum tolerances with performance-proved Pabco Insulations.

For power plant piping and equipment, a Pabco Insulation insures peak performance wherever temperatures must be maintained up to 1900° F. Pabco's Caltemp and 85% Magnesia insulations are "Precision-Molded" by a patented process in both pipe and block form. For data on technical advantages...case histories...or engineering consultation, write... or call...a Pabco insulation engineer.

### PABCO INDUSTRIAL INSULATIONS DIVISION

Fibreboard Paper Products Corporation San Francisco 19 • Chicago 54 Houston 4 • New York 16 • Los Angeles

#### INSULATION GUIDE

Temperature	Recommended Pabco Insulation
to 550° F.	85% Magnesia pipe covering - block - cement
to 1200° F.	Caltemp pipe covering • block • cement
to 1500° F.	Prasco 15 C pipe covering - block - cement
to 1900° F.	Prasco 19 C block

Joseph B. Fagot, General Manager of Organization and Personnel for FIBREBOARD PAPER PRODUCTS CORPORA-TION, was elected a Vice President by the Board of Directors following the company's annual meeting of shareholders in San Francisco, California, on Friday, April 8, 1960.

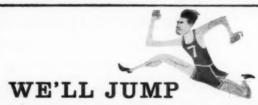
Mr. Fagot's election as an officer of the company was credited by President William L. Keady as a "recognition of his continuous accomplishments in Fibreboard's program to develop an aggressive management organization and to attract new management and sales trainees of the highest calibre".

Mr. Fagot joined Fibreboard in early 1958 as Director of Management Development. He will headquarter at the Company's executive offices, 475 Brannan Street, San Francisco,

California.

Vern H. Talcott was elected an Assistant Secretary of FIBREBOARD PAPER PRODUCTS CORPORATION by the Board of Directors following the company's annual meeting of shareholders.

Mr. Talcott has been with Fibreboard since 1950. An attorney and a member of both the California and Colorado State Bars, he is manager of Fibreboard's Real Property Development. He will make his headquarters at the Company's executive offices in San Francisco. California.



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### LAGGING IN FRONT

This is B.B.A. Asbestos Fibre-Filled Rope Lagging for Steam Pipe Insulation, one of many of asbestos products, from yarn and rovings to cloth, tapes and jointings of all types and the world-famous MINTEX friction materials and MINTEX Industrial Plastics—made by B.B.A. In production, as in research, we are in the front of our field.



# LE TOURNEAU ASBESTOS CORPORATION

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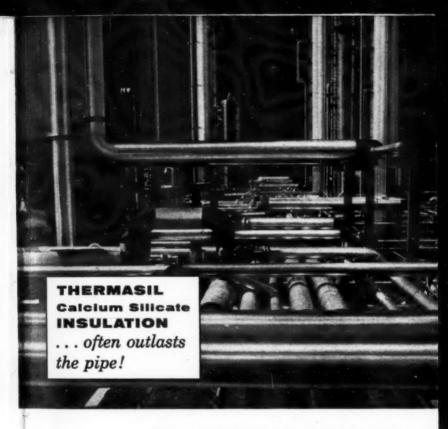
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- \*Clean
- \*Fiberize
- \*Card
- \*Grade according to desired specifications

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